DV Cameras, Decks, and Transcoders tested by Avid

for

Media Composer Adrenaline 2003v1.x
NewsCutter Adrenaline FX v5.x
Avid Xpress Pro 2003v4.x
Avid NewsCutter XP v5.x
Avid Xpress DV v3.5.x

The table below summarizes the results of Avid's testing of DV. DV devices vary widely in their capabilities and limitations. Therefore, you should review the information carefully before selecting a device, to ensure that it will meet your needs. Some devices may have limitations beyond those revealed in Avid's testing. In addition,
device models are sometimes updated, which can affect test results and known issues. Avid is providing this information for your convenience only. Use of these devices is at your own risk. Avid accepts no responsibility for your purchase and use of any devices listed here. The information presented below is the best available at the time, but does not represent a promise by Avid and is subject to change without notice.

The following DV devices were tested on both Mac OS X and Windows XP Professional and any limitations are noted:

Things to keep in mind when using FireWire device control:

- **Device Setup** – Most devices need to be setup to be controlled remotely. Read the device manual to properly configure the device so that it can be controlled by an Avid application. Many devices should be in Remote mode. Cameras should operate in VCR mode, not CAMERA mode. Make sure the input and output selections are also configured properly.
- **Digital Cut** - Digital cut is not guaranteed to be frame accurate when the device is controlled over FireWire, although Avid strives to make it as frame accurate as possible. The DV digital cut offset can be used to tune digital cut frame accuracy for your device. Some devices behave inconsistently making it difficult to achieve accurate results. We recommend adding black to both the beginning and end of the sequence.
- **Capture** - Capture from transcoders is not guaranteed to be frame accurate. The DV capture offset can be used to fine tune capture to make it more accurate for your device.
- **Drop/Non-Drop Frame Timecode** – DV tapes can have drop or non-drop frame timecode. Many devices do not support the timecode command that indicates whether or not a timecode is drop or non-drop frame. Since most DV tapes are drop frame, we default the timecode to drop frame. If you are using a non-drop frame tape and the timecode in the Capture or Digital Cut tool displays drop frame, you can correct this. In the Capture tool, arm at least one video track and timecode track. Play the tape in the deck or camera, the timecode should correct itself to the correct drop frame or non-drop frame.
- **Qualification** – Although not all devices on this list go through the official qualification process, most devices are used by engineers and testers during product development.

Products Tested
MCA = Avid Media Composer Adrenaline 2003v1.0.1
NCA = Avid NewsCutter Adrenaline FX v5.0.3
XPRO = Avid Xpress Pro 2003v4.0
NCXP = Avid NewsCutter XP v5.0
XPDV = Avid Xpress DV v3.5.x

Camera/Deck	Video Format	Notes & Information	Software Only	Adrenaline	Mojo
Canon GL1	NTSC	Device Control – Slow response to commands	XPDV v3.5.x	MCA v1.0.1 NCA v5.0.1	
Canon Optura 100MC	NTSC	Issues - Failed most editing functions when tested with XPDV v3.5.x	Not Qualified		
Canon DM XL1	PAL	Device Control – Slow response to commands Client Monitor – Intermittently has blue flash	XPDV v3.5.x		
Canon XL1	NTSC	Device Control – Slow response to commands	XPDV v3.5.x	MCA v1.0.1 NCA v5.0.1	
Canon XL1s	NTSC	Device Control – Slow response to commands Digital Cut – Inconsistent results	XPDV v3.5.x	MCA v1.0.1 NCA v5.0.1	
JVC BR-DV600UA	NTSC	Device Control – Slow response to commands Digital Cut – Doesn't seem to accept DV input when it is configured in the Deck Configuration Settings. To get this device to accept input, remove the deck from the Deck Configuration Setting. Cycle the power on the deck. Operate with the digital cut tool in Local mode. Manually control the deck through the front panel on the deck. Issues – Customers have reported audio dropouts and stuttering with this deck.	XPDV v3.5.x		
JVC BR-DV3000U	NTSC PAL	Device Setup – Cycle the power on this device when switching between PAL & NTSC. The Long Pause time menu setting must be set to a minimum of 30 seconds to work with Digital Cut.	WinXP XPDV v3.5.x Macintosh XPDV v3.5.x		

Camera/Deck	Video Format	Notes & Information	Software Only	Adrenaline	Mojo
		Issues – Customers have reported audio dropouts and stuttering. Macintosh Issues – Loses communication with the application. Capture works, digital cut failed. If the template is not available in your application (3.5.x or earlier), download it from the Avid Knowledge Center.	limited qualification		
JVC SR-VS20	NTSC	Device Setup –Use the CH buttons on the deck to set the input selection to F1. The arrow under the DV button should be lit and pointing to the right. Issues – Customers have reported audio dropouts and stuttering. Cycle power if communication problems occur.	XPDV v3.5.x		
JVC SR-VS30	NTSC	Issues – Customers have reported audio dropouts and stuttering.	XPDV v3.5.x		
Panasonic AG-DV1000	NTSC	Device Setup – The input selection on this device must be set to "DV". Digital Cut – Inconsistent results	XPDV v3.5.x XPRO v4.0.x NCXP v5.0.x	MCA v1.0.1 NCA v5.0.1	
Panasonic AG-DVC10	NTSC	Issues – Not recognized on the Macintosh (software only.) Digital cut may corrupt the timecode at the start of the cut. For best results, record from this device using the No Deck option in the Record tool.	WinXP XPDV v3.5.x Macintosh XPDV v3.5.x Not Qualified		
Panasonic AG-DVX100E	PAL	Device Setup – See Notes[1]	XPRO v4.0.x NCXP v5.0.x	MCA v1.0.1 NCA v5.0.1	.
Panasonic AG-DVX100P	NTSC	Device Setup – See Notes[1]	XPRO v4.0.x NCXP v5.0.x	MCA v1.0.1 NCA v5.0.1	
Panasonic AJ-D230HP	NTSC	Device Setup - VERY IMPORTANT o Input switch on front panel of deck must be set to **OPTION** o Make sure the deck is in **REMOTE** mode. o Deck Menu Settings o 800 - DIF SPEED - S200	WinXP XPDV v3.5.x (unofficially tested in house)		

Camera/Deck	Video Format	Notes & Information	Software Only	Adrenaline	Mojo
		o 802 - DIF IN CH - 0 (63 for Adrenaline/Mojo) o 803 - DIF OUT CH - 0 (63 for Adrenaline/Mojo) o 805 - DIF REC SEL - ERASE o 806 - DIF CONFIG - 10 o 807 - DIF STD IN - OFF Macintosh (Software Only) – Not qualified for the software only applications. Avid has tested up to Mac OSX 10.2.6. Windows XP (Software Only) – The firmware on this deck must be updated to work with WinXP (DirectShow). To get the latest version of the DIF firmware in the AJ-D230, press the Local/Menu/Remote switch to the Menu position while pressing the Eject button on the front panel. Press the FF (up) button while pressing the REW (mode) button. The software versions (IF, AV-SYS, etc) should appear on the monitor connected to the deck. The DIF flash ROM must be up to at least Rev 1.17-00.	Macintosh Not Qualified		
Panasonic AJ-D250E	PAL	Device Setup –See Notes[2] Macintosh (Software Only) – Not qualified for the software only applications. Avid has tested up to Mac OSX 10.2.6. Windows XP (Software Only) – The firmware on this deck must be updated to work with WinXP (DirectShow). To get the latest version of the DIF firmware in the AJ-D230, press the Local/Menu/Remote switch to the Menu position while pressing the Eject button on the front panel. Press the FF (up) button while pressing the REW (mode) button. The software versions (IF, AV-SYS, etc) should	Windows XP XPDV v3.5.x XPRO v4.0.x NCXP v5.0.x Macintosh Not Qualified		

Camera/Deck	Video Format	Notes & Information	Software Only	Adrenaline	Mojo
		appear on the monitor connected to the deck. The DIF flash ROM must be up to at least Rev 1.17-00.			
Panasonic AJ-D250P	NTSC	Device Setup – See Notes[2] Macintosh (Software Only) – Not qualified for the software only applications. Avid has tested up to Mac OSX 10.2.6. Windows XP (Software Only) – The firmware on this deck must be updated to work with WinXP (DirectShow). To get the latest version of the DIF firmware in the AJ-D230, press the Local/Menu/Remote switch to the Menu position while pressing the Eject button on the front panel. Press the FF (up) button while pressing the REW (mode) button. The software versions (IF, AV-SYS, etc) should appear on the monitor connected to the deck. The DIF flash ROM must be up to at least Rev 1.17-00.	WinXP XPDV v3.5.x XPRO v4.0.x NCXP v5.0.x Macintosh Not Qualified		
Panasonic AJ-D455E	PAL	Device Setup – See Notes[3] Macintosh (Software Only) – Not qualified for the software only applications. Avid has tested up to Mac OSX 10.2.6.	WinXP XPRO v4.0.x NCXP v5.0.x Macintosh Not Qualified		
Panasonic AJ-D455P	NTSC	Device Setup – See Notes[3] Mac Software Only Issue – This device is NOT QUALIFIED with the software only applications. We have tested up to Mac OSX 10.2.6.	WinXP XPDV v3.5.x XPRO v4.0.x NCXP v5.0.x Macintosh Not Qualified		XPRO v4.0.x NCXP v5.0.x
Panasonic AJ-D950 *SDI & COMPONENT*	NTSC PAL			NCA v5.0.1	
Sharp VL-WD250	NTSC	Unreliable with XPDV v3.5.*x*	XPDV v3.5.x unreliable	MCA v1.0.1, NCA v5.0.1	

Camera/Deck	Video Format	Notes & Information	Software Only	Adrenaline	Mojo
				unreliable	
Sony BVW-75 *COMPONENT*	NTSC		XPDV v3.5.x	NCA v5.0.1	
Sony DCR-PC100	NTSC		XPDV v3.5.x		
Sony DCR-PC120E	PAL		XPDV v3.5.x	MCA v1.0.1 NCA v5.0.1	
Sony DCR-TRV17	NTSC	Device Setup - Use the Sony DCR-TRV900 machine template	XPDV v3.5.x		
Sony DCR-TRV27	NTSC	Device Setup - If the template is not available in your application (3.5.x or earlier), download it from the Avid Knowledge Center.	XPDV v3.5.x		
Sony DCR-TRV30	NTSC	Device Setup - Use the Sony DCR-TRV900 machine template	XPDV v3.5.x		
Sony DCR-TRV900	NTSC		XPDV v3.5.x XPRO v4.0.x NCXP v5.0.x	MCA v1.0.1 NCA v5.0.1	XPRO v4.0.x NCXP v5.0.x
Sony DCR-TRV900E	PAL		XPDV v3.5.x XPRO v4.0.x NCXP v5.0.x	MCA v1.0.1 NCA v5.0.1	XPRO v4.0.x NCXP v5.0.x
Sony DCR-TRV950	NTSC		XPRO v4.0.x, NCXP v5.0.x	MCA v1.0.1, NCA v5.0.1	
Sony DCR-VX1000	NTSC		XPDV v3.5.x		
Sony DCR-VX2000	NTSC		XPDV v3.5.x, XPRO v4.0.x, NCXP v5.0.x	MCA v1.0.1, NCA v5.0.1	XPRO v4.0.x, NCXP v5.0.x
Sony DNW-A75 *SDI & COMPONENT*	NTSC PAL			NCA v5.0.1	
Sony DRV-1000	NTSC	Digital Cut – Recording to tape is done in non-drop frame timecode. During digital cut, the client monitor is intermittently black and white although the material recorded on the tape	XPDV v3.5.x		

Camera/Deck	Video Format	Notes & Information	Software Only	Adrenaline	Mojo
		is correct. Device Notes – The unit will automatically eject the tape if it is rolled to the very beginning or very end.			
Sony DSR-DU1	NTSC	Device Setup – See Note[4] Digital Cut - This device performs linear digital cut only on the empty space of the disk drive. You cannot control timecode using deck control. Recording media from camera to disk works.	XPDV v3.5.x		
Sony DSR-V10	NTSC	Digital Cut – Inconsistent results	XPDV v3.5.x		
Sony DSR-11	NTSC PAL	Device Setup – Cycle the power when switching between PAL and NTSC. Mojo or Adrenaline – If you lose communication with Mojo or Adrenaline after connecting a FireWire camera or deck, there are several things you can do to correct the situation. Quit the application. Before re-launching, cycle the power going to the FireWire camera or deck. If the deck and camera goes into standby mode, unplug the power cable to clear the bus. After power is restored to the camera or deck, try starting the application. If there is still no communication with the Mojo or Adrenaline, power cycle the Mojo or Adrenaline.	XPDV v3.5.x XPRO v4.0.x NCXP v5.0.x	MCA v1.0.1 NCA v5.0.1	
Sony DSR-25	NTSC PAL	Device Setup – Cycle the power when switching between PAL and NTSC.	XPDV v3.5.x		
Sony DSR-40	NTSC		XPDV v3.5.x		
Sony DSR-40P	PAL	Issues – Some customers have reported rolling video on the Client monitor with XPDV 3.5.4. We have not been able to reproduce this inhouse. Device Control Issues - Device control is not working properly in XPDV 3.5.4. You can download the correct machine template from the Avid Knowledge Center to	XPDV v3.5.x XPRO v4.0.x NCXP v5.0.x		

Camera/Deck	Video Format	Notes & Information	Software Only	Adrenaline	Mojo
		correct this problem.			
Sony DSR-45	NTSC	Device Setup – See Notes[5]	XPDV v3.5.x		
Sony DSR-45P	PAL	Device Setup – See Notes[5]	XPDV v3.5.x XPRO v4.0.x NCXP v5.0.x	MCA v1.0.1 NCA v5.0.1	
Sony DSR-50	NTSC	Device Setup – The video input setting on the side of this device must be set to DV.	XPDV v3.5.x		
Sony DSR-250	NTSC		XPDV v3.5.x		
Sony DSR-1500	NTSC	Device Setup – See Notes[6] Digital Cut – Inconsistent results	XPDV v3.5.x		
Sony DSR-1500A	NTSC	Device Setup – See Notes[6]	XPDV v3.5.x	MCA v1.0.1 NCA v5.0.1	
Sony DSR-1500AP	PAL	Device Setup – See Notes[6]	XPDV v3.5.x		
Sony DSR-1800	NTSC	Device Setup – See Notes[6] Digital Cut – Inconsistent results	XPDV v3.5.x		
Sony DSR-2000	NTSC	Device Setup – See Notes[7] Digital Cut – Inconsistent results	XPDV v3.5.x	MCA v1.0.1 NCA v5.0.1	
Sony DSR-2000P	PAL	Device Setup – See Notes[7] Digital Cut – Inconsistent results	XPDV v3.5.x		
Sony DSR-PD150	NTSC	Device Setup – A/V->DV function must be set to OFF to see output on the Client monitor	XPDV v3.5.x XPRO v4.0.x NCXP v5.0.x	MCA v1.0.1 NCA v5.0.1	
Sony DSR-PD150P	PAL	Device Setup – A/V->DV function must be set to OFF to see output on the Client monitor	XPDV v3.5.x XPRO v4.0.x NCXP v5.0.x	MCA v1.0.1 NCA v5.0.1	
Sony GV-D300	NTSC		XPDV v3.5.x, XPRO v4.0.x, NCXP v5.0.x	MCA v1.0.1, NCA v5.0.1	
Sony GV-D300E	PAL		XPDV v3.5.x XPRO v4.0.x NCXP v5.0.x	MCA v1.0.1 NCA v5.0.1	
Sony PVW-2800 *COMPONENT*	NTSC PAL			NCA v5.0.1	
Sony UVW-1800	NTSC			NCA v5.0.1	

Camera/Deck	Video Format	Notes & Information	Software Only	Adrenaline	Mojo
COMPONENT	PAL				

Transcoders

Canopus ADVC-100	NTSC PAL	Device Setup – Avid recommends that you do not hot plug this device.	XPDV v3.5.x
Como ProSDI-MKII	NTSC	Not supported on Macintosh - There is no menu option to use with the Macintosh. NTSC SDI & Analog – not supported due to image quality. PAL SDI & Analog supported -	XPRO v4.0.x NCXP v5.0.x
Data Video DAC-2	NTSC PAL		XPDV v3.5.x
Formac Studio DV Converter	NTSC	Device Setup - When using S-video In and FireWire Out, set mode to "A" Notes – Analog video output quality is not good.	XPDV v3.5.x
Laird Blue Flame Pro 5000A	NTSC		XPDV v3.5.x
Laird LTM-FFP	NTSC	Device Setup – Device requires reference. Notes - Analog audio output is low	XPDV v3.5.x
Laird LTM-FFP	PAL	Device Setup – Device requires reference. Notes - Analog audio output is low	XPDV v3.5.x
Laird LTM-5000B FS	NTSC PAL		XPDV v3.5.x
Laird LTM-5500	NTSC	Device Setup – Do not hot plug.	XPDV v3.5.x
Laird LTM-5500	PAL	Device Setup – Do not hot plug.	XPDV v3.5.x
Laird LTM-5500 FS	NTSC		XPDV v3.5.x
Laird LTM-5500 FS	PAL		XPDV v3.5.x
Miranda DV Bridge+	NTSC PAL	Device Setup – Watch the switches on the back – PAL/NTSC, DV/DVCPRO, RS422 – set to "tributary". Do not hot plug. Issues – AES/EBU output inconsistent.	XPDV v3.5.x
ProMax DA-MAX+	NTSC PAL	Tested with firmware upgrade 56, SDI & Analog Device Setup - When switching between PAL and NTSC, disconnect the power source on the transcoder. Cycling the power will not change the mode because when it is powered off, it's in standby mode. Requires reference that can be done via the composite input connector.	XPDV v3.5.x

[1] **Panasonic AG DVX-100E & AG-DVX-100P Device Setup**

- Make sure the device is in VTR mode by toggling the button on the front of the camera.
- Pertinent menu settings on the camera

- Recording Setup
  - REC SPEED - **SP**
  - 1394 TC REGEN - **OFF**
  - TC MODE - **DF/NDF - SHOULD MATCH THE TAPE IN DEVICE**
  - TCG - **REC RUN**
  - FIRST REC TC - **REGEN**
- AV In/Out Setup
- DV OUT - **OFF** (may not be pertinent)

[2] **Panasonic AJ D250E & AJ-D250P Device Setup**

- Input switch on front panel of deck must be set to OPTION
- Make sure the deck is in REMOTE mode.
- Deck Menu Setup
  - 102 - S/F/R EE SEL TAPE
  - 106 - AUTO BACK ON
  - 107 - FORMAT SEL DVCPRO
  - 204 - ACK RETURN ON
  - 208 - REMOTE SEL 1394
  - 503 - TC REGEN TC
  - 506 - TC MODE I-REG
  - 509 - TCG CF FLAG OFF (ON for Mojo/Adrenaline)
  - 604 - FREEZE SEL FRAME
  - 605 - IN FROM DET FORCED
  - 606 - STD/NSTD SEL AUTO
  - 800 - DIF SPEED S200
  - 802 - DIF IN CH 0 (63 for Adrenaline/Mojo)
  - 803 - DIF OUT CH 0 (63 for Adrenaline/Mojo)
  - 805 - DIF REC SEL ERASE
  - 806 - DIF CONFIG 10 (DFLT for Adrenaline/Mojo)
  - 807 - DIF STD IN OFF (ON for Adrenaline/Mojo)
  - 808 - DIF AUD SEL DIF

[3] **Panasonic AJ-D455E & AJ-D455P Device Setup**

- Relevant Menu Settings

- 106 - PLAY DELAY 0
- 109 - EJECT EE SEL EE
- 110 - F/R EE SEL EE
- 110 - STOP EE SEL EE
- 201 - 9P SEL **OFF**
- 202 - ID SEL **DVCPRO**
- 220 - AV/C CMD SEL **ON**

- 303 - STD/NON-STD **AUTO**
- 304 - SERVO REF **AUTO**
- 313 - AFTER CUE-UP **STILL**
- 503 - TC REG **TC (at least)**
- 504 - REGEN MODE **ON**
- 510 - RUN MODE **FREE**
- 882 - DIF IN CH **AUTO (use 63 w/FireBOB Pro)**
- 883 - DIF OUT CH **AUTO (use 63 w/FireBOB Pro)**
- 886 - DIF CONFIG **DFLT**
- **Relevant Panel Switches**
  Video In - DVCPRO/DV

[4] **Sony DSR-DU1 Device Setup**

Menu Settings

- PAGE 0
  - MODE - STD
  - MPC REM - DIS
- PAGE 2
  - TCG - REC
  - PC PRESET - 0s
  - UB PRESET - 0s
  - FRAME - DF
- PAGE 3
  - DELETE - LAST
  - MPARAREC - OFF
  - CACHE - 0s
- PAGE 5
  - PB INHIBIT - ON (Tai has OFF)
  - TALLY - ON

- DELETE - ALL
- ENHANCE - OFF

[5] **Sony DSR-45 & DSR-45P Device Setup**

- Input Selection on front panel set to DV.
- Device must be in REMOTE mode.
- Menu Setup
  - TC/UB SET: DV TC IN INTERNAL
  - TC/UB SET: TC MAKE REGEN
  - TC/UB SET: TC RUN FREE RUN
  - TC/UB SET: JOG TC OUT OFF
  - DISPLAY SET: PB/EE SEL EE
  - REC SET: REC MODE DV or DVCAM (should match tape)

[6] **Sony DSR-1500, 1500A, 1500AP, 1800** *(There may be some minor variations between these devices for these settings).*

- Put this device in Remote mode with button on front panel
- Set the Remote setting to iLINK. The bottom right corner of display panel will say REMOTE with iLINK below it.
- To have the Client monitor work properly, set the menu option AUTO EE SELECT as follows:
  - Cassette out = EE
  - Stop = EE
  - Standby off = EE

[7]**Sony DSR-2000/2000P Deck Setup**

Relevant Deck Menu Settings

- 108 Auto EE Select S/F/R
- 109 Forced EE When Tape Unthread ON
- 308 Selection of Std/Non-Std for Analog Video In STD
- 319 PreRead Select A/V
- 605 TC Regen Mode TC&UB
- 607 U-Bit Binary Group Flag 000
- 610 Regen Control Mode AS&IN (regardless of the setting of the INT/EXT-PRESET/REGEN switch, in assemble or insert editing, the timecode generator regenerates according to the timecode on the tape.
- 611 TC Output Phase In EE Mode MUTE

- 612 TC Output Mute In Search Mode **ON**
- 613 VITC Output **VITC**

Deck Panel Settings

- Input Select - SDTI/iLink
- Remote - on
- iLink - on
- TC Generator - middle setting
- Free run
- VITC - off
- TC Select TC
- Process Control local

Revision History:

10/6/03 – Added info. about Mojo and Adrenaline to Sony DSR-11.